

I. CLAIM 9 SATISFIES THE REQUIREMENTS OF 35 U.S.C. § 112, SECOND PARAGRAPH

The Office Action rejects claim 9 under 35 U.S.C. §112 second paragraph, as indefinite. Claim 9 has been amended to obviate the rejection. Withdrawal of the rejection under 35 U.S.C. §112, second paragraph, is respectfully requested.

II. THE CLAIMS DEFINE ALLOWABLE SUBJECT MATTER

The Office Action rejects claims 1 and 14-17 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,616,935 to Koyama et al; claims 1-3, 7, 8 and 17 under 35 U.S.C. § 102(e) as unpatentable over U.S. Patent No. 5,623,155 to Kerber et al; claims 1-3, 9, 14 and 17 under 35 U.S.C. § 102(e) as unpatentable over U.S. Patent No. 5,920,085 to Han et al.; claims 1, 9, 15 and 16 under 35 U.S.C. § 102(e) as unpatentable over Yamazaki et al.; and claims 1-3, 14 and 17 under 35 U.S.C. 102(e) over U.S. Patent No. 6,064,090 to Miyamoto et al.

Koyama et al. does not teach "wherein at least one of the channel region itself and at least one component part, having at least one part provided above or on the channel region, has a portion outwardly extending therefrom.", as claimed in claim 1.

Instead, Koyama teaches making one channel length shorter than another channel length can reduce the threshold voltage required in a thin film transistor (TFT).

Because Koyama does not disclose a component having at least part of a portion which extends outwardly from the channel region, it cannot provide the advantages of the claimed invention. For example, Koyama discloses the channel length of a P-channel TFT made shorter than that of an N-channel TFT, preferably by 20%, column 2 lines 23-36. Thus, Koyama does not provide the advantage of a portion extending from the channel region which will further help to dissipate heat during operation.

However, Koyama is completely devoid of this advantage. The fact that Koyama is completely devoid of this advantage shows that it would not have been obvious to one of ordinary skill in the art to modify its disclosure to make up for the deficiencies in Koyama discussed above. Specifically, if it had been obvious to one of ordinary skill in the art to modify Koyama to make up for the deficiencies discussed above, then one of ordinary skill in the art would have done so to attain the advantages. However, no such disclosures have been found that show the claimed invention.

For at least these reasons, claim 1 and claims 14-17 depending therefrom are not anticipated by Koyama. Withdrawal of the rejections of claims 1 and 14-17 under 35 U.S.C. §102(e) is respectfully requested.

Similarly, Kerber does not teach "wherein at least one of the channel region itself and at least one component part, having at least one part provided above or on the channel region, has a portion outwardly extending therefrom.", as claimed in claim 1

Instead, Kerber et al. teaches in col. 1, lines 64-col. 2, line 1 that "one end of the ridge does not project beyond, or only slightly projects beyond, the channel region. Undesirable, additional capacitances between the gate electrode and the source and drain regions are thus kept optimally small." Thus, Kerber et al. teach away from "a portion outwardly extending from the channel region", as claimed in claim 1.

Accordingly, claim 1 and claims 2, 3, 7, 8 and 17 depending therefrom are not anticipated by Kerber. Withdrawal of the rejections of claims 1-3, 7, 8 and 17 under 35 U.S.C. §102(e) is respectfully requested.

Similarly, Han does not teach or disclose "wherein at least one of the channel region itself and at least one component part, having at least one part provided above or on the channel region, has a portion outwardly extending therefrom.", as claimed in claim 1

Instead, Han et al. teaches a method for forming a field effect transistors which are capable of high saturation current and low leakage current, which may only require a single implantation step and which may be formed in a self-lined manner to provide a symmetrical transistor. Han et al. does not teach anything about a "portion outwardly extending from the channel region", as claimed in claim 1.

Accordingly, claim 1 and claims 2, 3, 9, 14 and 17 depending therefrom are not anticipated by Han. Withdrawal of the rejection of claims 1-3, 9, 14 and 17 under 35 U.S.C. §102(e) is respectfully requested.

Yamazaki does not teach "wherein at least one of the channel region itself and at least one component part, having at least one part provided above or on the channel region, has a portion outwardly extending therefrom.", as claimed in claim 1

Instead, Yamazaki et al. teaches a thin film transistor which is not effected by crystal grain boundaries. Yamazaki et al. does not teach or anticipate "a portion outwardly extending from the channel region ", as claimed in claim 1.

Accordingly, claim 1 and claims 9, 15 and 16 depending therefrom are not anticipated by Yamazaki. Withdrawal of the rejection of claims 1, 9, 15 and 16 under 35 U.S.C. §102(e) is respectfully requested.

Miyamoto et al. does not teach or suggest "wherein at least one of the channel region itself and at least one component part, having at least one part provided above or on the channel region, has a portion outwardly extending therefrom.", as claimed in claim 1

Instead, Miyamoto et al. teaches a semiconductor device having stable characteristics with suppressed source/drain leak current. Miyamoto et al. do not teach or suggest any means for wherein "a portion outwardly extending from the channel region", as claimed in claim 1.

Accordingly, claim 1 and claims 2, 3, 14 and 17 depending therefrom are not anticipated by Miyamoto. Withdrawal of the rejection of claims 1-3, 14 and 17 under 35 U.S.C. §102(e) is respectfully requested.

III. CONCLUSION

In view of the foregoing remarks, Applicants respectfully submit that claims 1-4, 7 and 9-24 define patentable subject matter and that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

Should the Examiner believe anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



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Date: December 28, 2000

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